

SAVE THIS MANUAL
FOR FUTURE REFERENCE

SEARS

**owners
manual**

**MODEL NO.
113.213832**

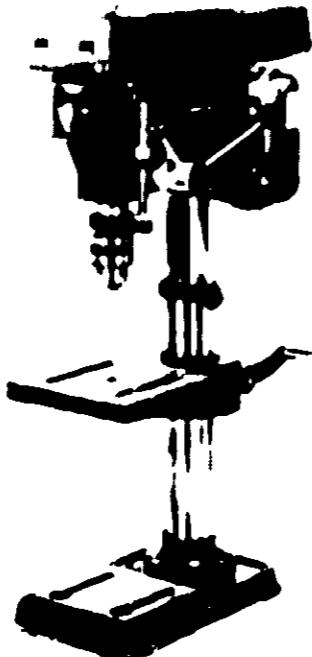
DRILL PRESS WITH
1/4 HP MOTOR

Serial
Number

Model and serial number
may be found at the rear of
the head.

You should record both
model and serial number in
a safe place for future use.

CAUTION:
Read GENERAL
and ADDITIONAL
SAFETY
INSTRUCTIONS
carefully



CRAFTSMAN.

MOTORIZED 10 INCH BENCH MODEL DRILL PRESS

- **assembly**
- **operating**
- **repair parts**

FULL ONE YEAR WARRANTY ON CRAFTSMAN DRILL PRESS

If within one year from the date of purchase this Craftsman Drill Press fails due to a defect in material or workmanship Sears will repair it, free of charge.

**WARRANTY SERVICE IS AVAILABLE BY RETURNING THE CRAFTSMAN DRILL PRESS TO
THE NEAREST SEARS RETAIL CATALOG STORE OR SERVICE CENTER DEPARTMENT IN
THE UNITED STATES**

THIS WARRANTY APPLIES ONLY WHILE THIS PRODUCT IS IN USE IN THE UNITED STATES

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

SEARS ROEBUCK AND CO. Sears Tower BSC 41-3 Chicago IL 60684

general safety instructions for power tools

1 KNOW YOUR POWER TOOL

Read the owner's manual and become familiar with the tool and its accessories. Learn the specific safety information for your tool.

2 GROUND ALL TOOLS

Use a three-wire power cord with a three-prong ground plug. Make sure the tool is properly grounded. If in doubt, consult a qualified electrician.

3 KEEP GUARDS IN PLACE

Always use the correct guard for the specific operation.

4 REMOVE ADJUSTING KEYS AND WRENCHES

Form a habit of keeping tools and keys and adjusting wrenches are removed from the tool before turning it on.

5 KEEP WORK AREA CLEAN

Cluttered areas and benches invite accidents. Floor must not be slippery due to water or sawdust.

6 AVOID DANGEROUS ENVIRONMENT

Don't use power tools in damp or wet locations or expose them to rain. Keep work area well lighted. Provide adequate surrounding work space.

7 KEEP CHILDREN AWAY

All visitors should be kept a safe distance from work area.

8 MAKE WORKSHOP KID-PROOF

With padlocks, master switches, or by removing start keys.

9 DON'T FORCE TOOL

It will do the job better and safer at the rate for which it was designed.

10 USE RIGHT TOOL

Don't force tool or attachment to do a job it was not designed for.

11 WEAR PROPER APPAREL

Do not wear loose clothing, gloves, neckties or jewelry that might get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair. Roll long sleeves above the elbow.

12 USE SAFETY GOOGLES (Head Protection)

Wear safety glasses with side shields. A 1/4" side shield is the minimum requirement. If using eye protection, they must be certified by the American National Standards Institute and marked "ANSI Z87.1-1989".

13 SECURE WORK

The workpiece should be secured whenever it is safe to do so by clamps, fasteners, or supports.

14 DON'T OVERREACH

Keep hands, feet and body in balance when operating.

15 MAINTAIN TOOLS WITH CARE

Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.

16 DISCONNECT TOOLS

Before servicing, when changing accessories such as blades, bits, cutters, etc.

17 AVOID ACCIDENTAL STARTING

Make sure switch is in OFF position before plugging in.

18 USE RECOMMENDED ACCESSORIES

Consult the owner's manual for recommended accessories. Follow the instructions that accompany the accessories. The use of improper accessories may cause hazards.

19 NEVER STAND ON TOOL

Serious injury could occur if the tool is tipped or if the cutting tool is accidentally contacted.

Do not store materials above or near the tool such that it is necessary to stand on the tool to reach them.

20 CHECK DAMAGED PARTS

Before further use of the tool, a guard or other part that is damaged should be carefully checked to ensure that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.

21 DIRECTION OF FEED

DO NOT OPERATE DRILL PRESS IN THE DIRECTION OF FEED.

additional safety instructions for drill presses

WARNING For your own safety do not attempt to operate your drill press until it is completely assembled and installed according to the instructions and until you have read and understand the following

	Page
1 General Safety Instructions for Power Tools	2
2 Getting to Know Your Drill Press	12
3 Basic Drill Press Operation	16
4 Adjustments	18
5 Maintenance	19

6 Stability of Drill Press

DO NOT OPERATE DRILL PRESS IN THE DIRECTION OF FEED. DO NOT OPERATE DRILL PRESS IN THE DIRECTION OF FEED. DO NOT OPERATE DRILL PRESS IN THE DIRECTION OF FEED. DO NOT OPERATE DRILL PRESS IN THE DIRECTION OF FEED.

7 Location

DO NOT OPERATE DRILL PRESS IN THE DIRECTION OF FEED. DO NOT OPERATE DRILL PRESS IN THE DIRECTION OF FEED. DO NOT OPERATE DRILL PRESS IN THE DIRECTION OF FEED.

8 Kickback

DO NOT OPERATE DRILL PRESS IN THE DIRECTION OF FEED. DO NOT OPERATE DRILL PRESS IN THE DIRECTION OF FEED. DO NOT OPERATE DRILL PRESS IN THE DIRECTION OF FEED. DO NOT OPERATE DRILL PRESS IN THE DIRECTION OF FEED. DO NOT OPERATE DRILL PRESS IN THE DIRECTION OF FEED.

9 Protection Eyes Hands Face Ears and Body

WARNING To avoid being pulled into the spinning tool -

1 Do NOT wear

- gloves
- necktie
- loose clothing
- jewelry

2 Tie back long hair

a. If any part of the drill press frame or main housing has been damaged or broken, such as the motor switch or other operating controls, a safety device or the power cord, do not operate immediately, but the particular part is properly repaired or replaced.

b. Never place your fingers in a position where they could contact the drill or other cutting tool. The workpiece should not unexpectedly shift or your hand should not

c. To avoid injury from parts thrown by the spring follow instructions exactly as given and shown in adjusting spring tension of quill.

22 NEVER LEAVE TOOL RUNNING UNATTENDED

DO NOT LEAVE DRILL PRESS RUNNING UNATTENDED.

additional safety instructions for drill presses

* Do not use the quill to shorten or lengthen the column beyond its limits. They are cutting tools, not tools.

* Do not use wire when doing the type of work which may affect the safety of the wire.

11 Note and Follow the Safety Warnings and Instructions that Appear on the Panel on the Left Side of the Head

DANGER

FOR YOUR OWN SAFETY

- 1 READ AND UNDERSTAND OWNERS MANUAL BEFORE OPERATING MACHINE
- 2 WEAR SAFETY GOGGLES
- 3 DO NOT WEAR GLOVES, NECKTIE, OR LOOSE CLOTHING, TIE BACK LONG HAIR
- 4 SECURELY CLAMP WORK TO TABLE IF IT IS TOO SHORT TO CONTACT THE COLUMN WHEN IN OPERATING POSITION
- 5 USE RECOMMENDED SPEED FOR DRILL ACCESSORY AND WORKPIECE MATERIAL
- 6 SECURELY LOCK HEAD AND SUPPORT TO COLUMN ARM TO SUPPORT AND TABLE TO ARM BEFORE OPERATING DRILL PRESS
- 7 USE ONLY RECOMMENDED ACCESSORIES

12 The Drill Press has 3 speeds:

- 480 RPM
- 330 RPM
- 220 RPM

SEE right side of Head for the placement of belt on pulleys

* Do not use the quill to shorten or lengthen the column beyond its limits. They are cutting tools, not tools.

*

WARNING Do not allow familiarity (gained from frequent use of your drill press) to become commonplace. Always remember that a careless fraction of a second is sufficient to inflict severe injury.

The operation of any power tool can result in flying objects being thrown into the eyes which can result in severe eye damage. Always wear safety goggles. It is legal with ANSI Z87.1 shown on the page below. For more power tool safety facts, refer to page 12.



unpacking and checking contents

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Additional Safety Instructions for Drill Press	3	Drilling to Depth	15
Unpacking and Checking Contents	5	Depth Scale	15
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UNPACKING AND CHECKING CONTENTS

Model No. 113-213832 is shipped complete in one carton and contains a 1/4 HP 1725 RPM motor.

Separate all parts from packing materials and check each one with the Table of Loose Parts to make sure all parts are accounted for before starting assembly.

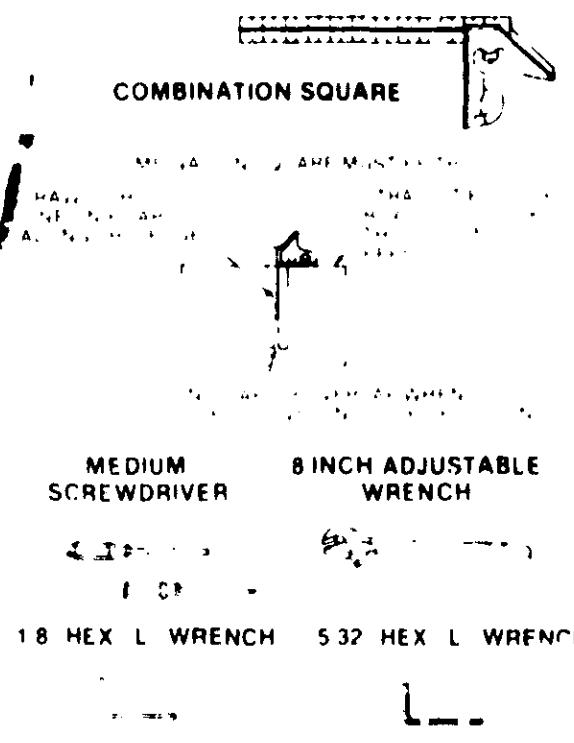
WARNING For your own safety, if any parts are missing, do not attempt to assemble the drill press plug in the power cord or turn the switch on until the missing parts are obtained and installed correctly.

Read all the instructions in this manual before attempting to assemble or use this tool.

WARNING To avoid fire or toxic reaction never use gasoline, naptha or similar highly volatile solvents.

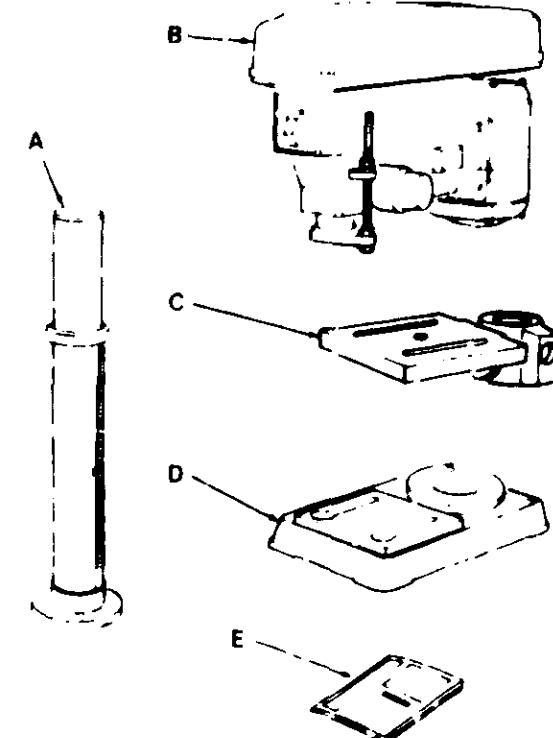
Always use a sharp cutting tool. A dull tool is more dangerous.

TOOLS NEEDED



TABLES OF LOOSE PARTS

Item	Description	Qty
A	Column Assembly	1
B	Head Assembly	1
C	Table Support Assembly	1
D	Base	1
E	Owners Manual	1
BAG OF LOOSE PARTS		
1	Spur Gear Assembly	1
1	Spur Gear Part No. 713814	1
1	Crossing Pin Part No. 713815	1
1	Chuck Key	1
1	Table Crank Assembly	1
1	Screw Pan Hd. 10-32x1/4	1
1	Pin	1
4	Bolts Hex Hd. 3/8-16x1/2	4
4	Lockwasher 3/8	4
2	Hex Set Screw 5/16-18x1/2	2
1	Switch Key	1
1	Screw Flat Hd. 10-32x7/8	1
1	Knob Belt Guard	1
1	Screw Pan Head 1/4-20x1/2	1



MOTOR SPECIFICATIONS AND ELECTRICAL REQUIREMENTS

MOTOR SPECIFICATIONS

This drill press is designed to use a 1725 RPM motor only. Do not use any motor that runs faster than 1725 RPM. It is wired for operation on 110-120 volts, 60 Hz alternating current.

WARNING To avoid injury from unexpected start-up, do not use blower or washing machine motors or any motor with an automatic reset overload protector.

CONNECTING TO POWER SOURCE OUTLET

The machine must be grounded when in use to protect the operator from electric shock.

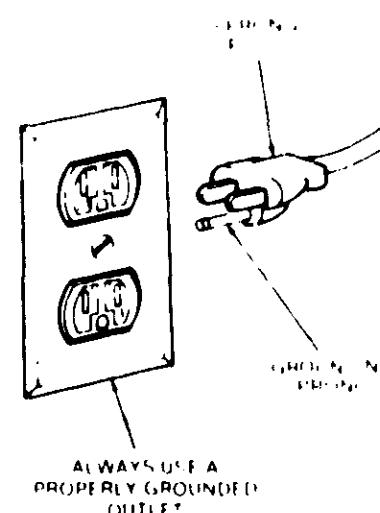
The power cord must be properly grounded. If the outlet is not properly grounded, have it checked by a qualified electrician. Circuit breaker must be 15 amp.

NOT ALL OUTLETS ARE PROPERLY GROUNDED
IF YOU ARE NOT SURE THAT YOUR OUTLET AS
PICTURED BELOW IS PROPERLY GROUNDED
HAVE IT CHECKED BY A QUALIFIED ELECTRICIAN

WARNING Do not permit fingers to touch the terminals of plugs when installing or removing the plug to or from the outlet.

WARNING If not properly grounded this power tool can incur the potential hazard of electrical shock particularly when used in damp locations in proximity to plumbing. If an electrical shock occurs there is the potential of a secondary hazard such as your hands contacting the cutting tool.

If power cord is worn or cut, or damaged in any way, have it replaced immediately to avoid shock or fire hazard.



If your unit is for use on less than 150 volts, it has a plug that looks like the above.

This power tool is equipped with a 3 conductor cord and grounding type plug which has a grounding prong approved by Underwriters Laboratories and the Canadian Standards Association. The ground conductor has a green jacket and is attached to the tool housing at one end and to the ground prong in the attachment plug at the other end.

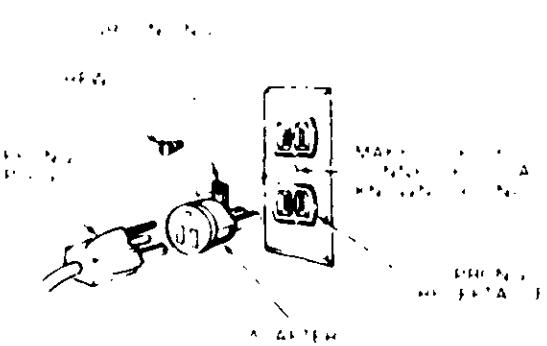
This plug requires a mating 3 conductor ground type outlet as shown.

If the outlet you are planning to use for this power tool is of the two-prong type DO NOT REMOVE OR ALTER THE GROUNDING PRONG IN ANY MANNER. Use an adapter as shown and always connect the grounding lug to known ground.

It is recommended that you have your electrician replace the TWO prong outlet with a properly grounded THREE prong outlet.

An adapter is shown below. It is to be connected to a 2-prong receptacle.

WARNING The green grounding lug extending from the adapter must be connected to a permanent ground such as to a properly grounded outlet box.



NOTE The adapter illustrated is for use only if you already have a properly grounded 2 prong receptacle. Adapter is not allowed in Canada by the Canadian Electrical Code.

The use of any extension cord will cause some loss of power. To keep this to a minimum and to prevent overheating and motor burn out, use the table below to determine the minimum wire size (A.W.G.) extension cord. Use only 3 wire extension cords which have 3 prong grounding type plugs and 3 pole receptacles which accept the tool's plug.

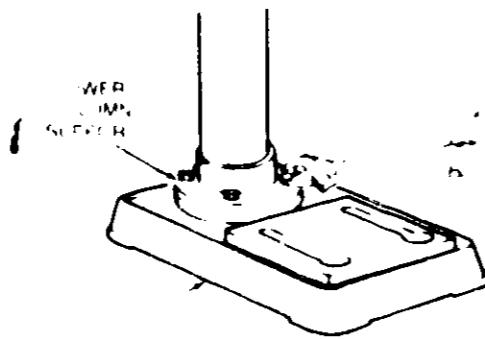
Extension Cord Length	Wire Size A.W.G.
Up to 100 Ft	16
100-200 Ft	14
200-400 Ft	10

assembly

WARNING For your own safety, never connect plug to power source outlet until all assembly steps are completed

ASSEMBLY OF BASE COLUMN

- 1 Position base on floor
- 2 Remove protective sleeve from column tube and discard. Place column assembly on base, and align holes in column support with holes in base
- 3 Locate four (4) 3/8-16x1 1/2 bolts and four (4) 3/8 lockwashers among loose parts bag
- 4 Install a lockwasher and bolt in each hole through column support and base, and tighten with adjustable wrench

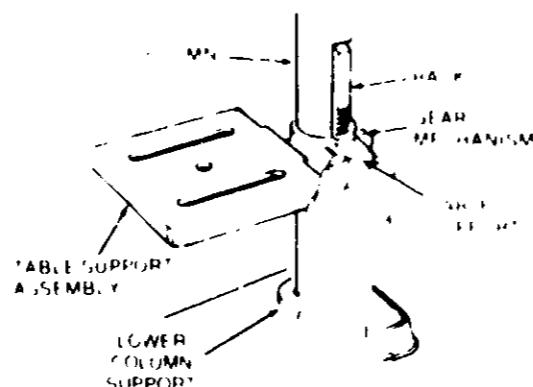


INSTALLATION OF TABLE SUPPORT ASSEMBLY AND HARDWARE

1. Set screw in collar with 1/8" HEX L WRENCH from collar and rack to column

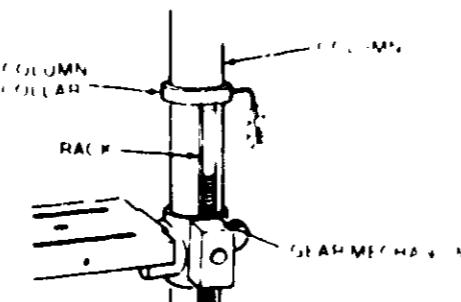


- 2 With long smooth end of rack pointing upward, slide rack down through large round opening in table support. Engage rack in gear mechanism found inside opening of table support



- 3 While holding rack and table support in an engaged position slide both down over column. Slide rack down column until rack is positioned against lower column support
- 4 Replace column collar and position it over rack. Tighten setscrew in collar with 1/8" HEX L wrench. Collar should sit loosely over rack and should not be angled on the column. Only tighten setscrew enough to keep collar in place. Rack should still slide freely in collar

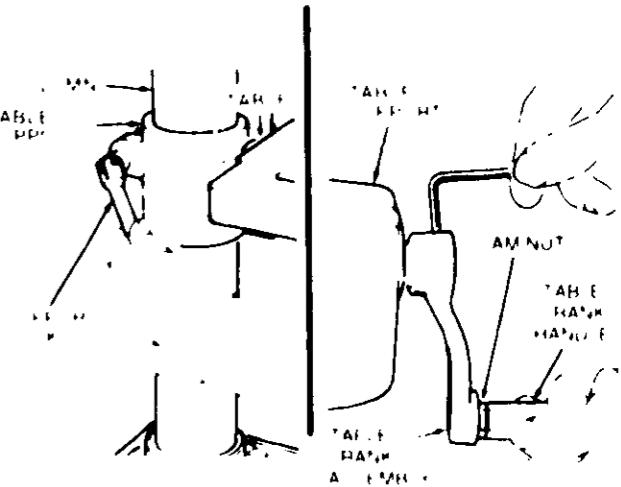
CAUTION: To avoid column tube or collar damage, do not over tighten setscrew.



assembly

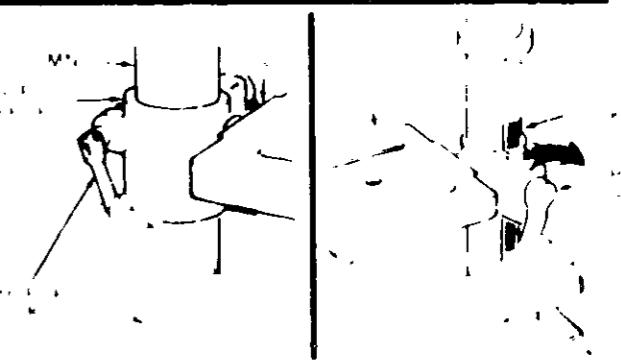
5 Locate table crank assembly and support lock arm ing nose parts

- 6 Install table crank assembly (as illustrated) onto shaft extending out of table support. Tighten set screw against flat side of shaft using 1/8" HEX L WRENCH



- 7 Install support lock from left side into table support and tighten by hand
- 8 The crank handle should turn freely when raising and lowering table. If adjustment is needed, loosen jam nut, then with a 1/4" screwdriver loosen bolt in handle until there is play between jam nut and handle. Tighten jam nut securely while holding handle with a screwdriver

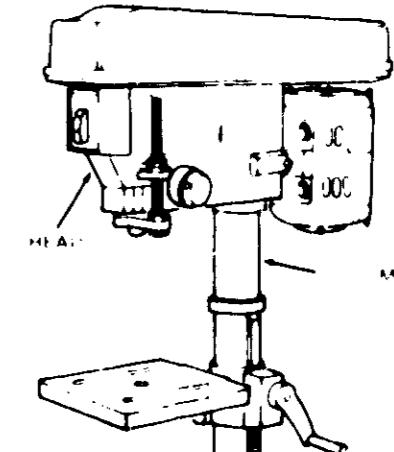
- 9 Loosen support lock and raise table support by turning table crank clockwise until supports at a working height. Tighten support lock



INSTALLING THE HEAD

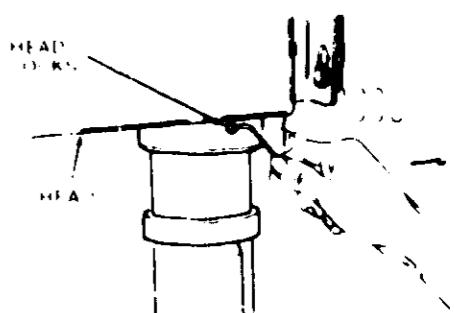
CAUTION The head assembly weights about 45 pounds. Carefully lift head

- 1 Remove protective bag from head assembly and discard. Carefully lift head above column tube and slide it onto column making sure head slides down over column as far as possible. Align head with table and base



- 2 Locate two (2) 5-16 18x1 1/2 set screws among loose parts bag

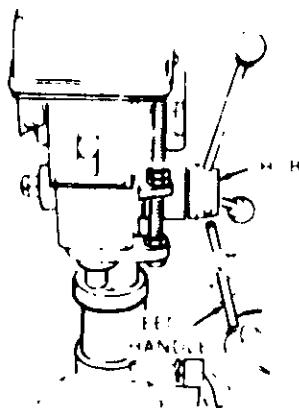
- 3 Install one set screw on each side of head to lock head into position and tighten with 5/32 HEX L wrench



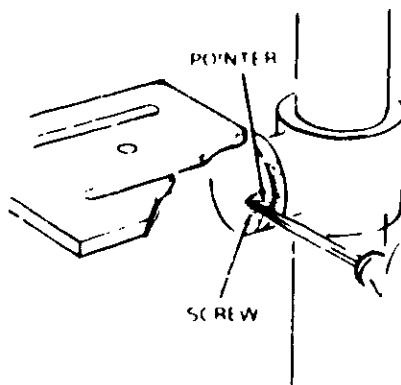
assembly

INSTALLING FEED HANDLES

- 1 Locate three (3) feed handles among loose parts
- 2 Screw the feed handles into the threaded holes in the hub and tighten

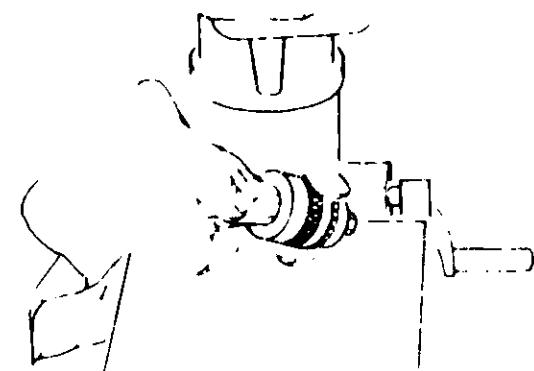


- 3 Locate one #10 32x1 4 pan hd. screw and one #10 pointer from loose parts bag
- 4 Inst. screw through pointer and into table support. Tighten screw with screwdriver

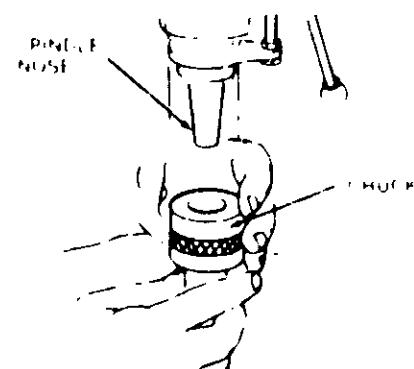


INSTALLING THE CHUCK

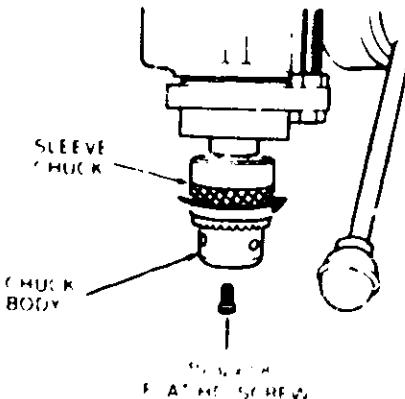
- 1 Locate chuck and one #10 32x7 8 flat hd. screw among loose parts
- 2 Clean out the TAPERED HOLE in the chuck as illustrated. Clean the spindle nose with a clean cloth. Make sure there are no foreign particles sticking to the surfaces. The slightest piece of dirt on the spindle nose or in the chuck will prevent the chuck from sealing properly. This will cause the drill to wobble.
- NOTE If TAPERED HOLE in the chuck is extremely dirty, use a cleaning solvent on the clean cloth



- 3 Push the chuck up on the spindle nose as far as it will go
- 4 Lightly tap the nose of the chuck with a piece of wood to insure proper seating of the chuck on the spindle



- 5 Open the jaws of the chuck as wide as they will go by turning the chuck sleeve
- 6 Insert screw inside chuck and tighten onto spindle nose with screwdriver



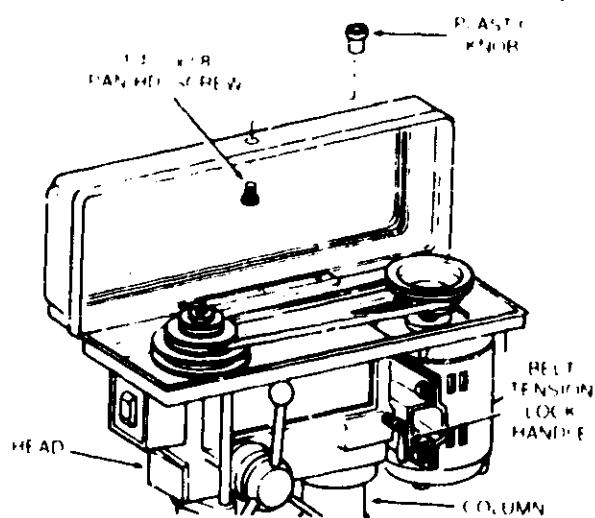
INSTALLATION OF BELT GUARD KNOB

- 1 Locate knob and 1 4 20x3 8 pan head screw in loose parts bag. Install screw in hole located in belt guard and attach knob turning until tight

TENSIONING BELT

NOTE The Drill Press is shipped with the belt installed but it should be properly tensioned before use.

- 1 Lift belt guard from right side and leave opened on hinge
- 2 Release Belt Tension Lock Handles located on each side of Drill Press head



- 3 Choose speed for drilling operation and move belt to correct position for desired speed

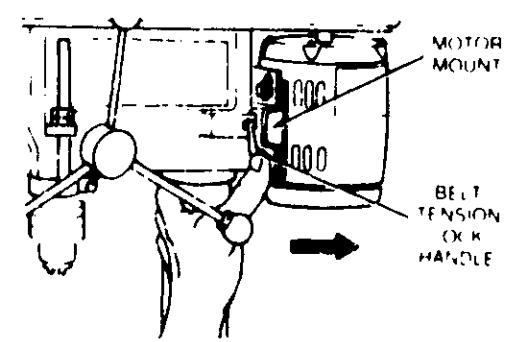
NOTE Refer to chart on side of Drill Press for Recommended Drilling Speeds



- 4 Adjust belt tension by pushing against motor mount moving motor toward rear (see illustration)
- 5 Tighten Belt Tension Lock Handles

NOTE Belt SHOULD deflect approximately 1/2 by thumb pressure at mid point of belt between pulleys

- 6 Close belt guard
- 7 If belt slips while drilling readjust belt tension

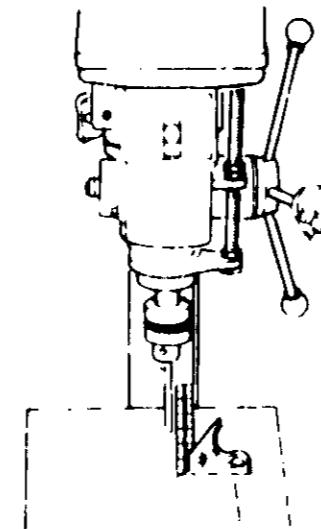


getting to know your drill press

ADJUSTING THE TABLE SQUARE TO HEAD

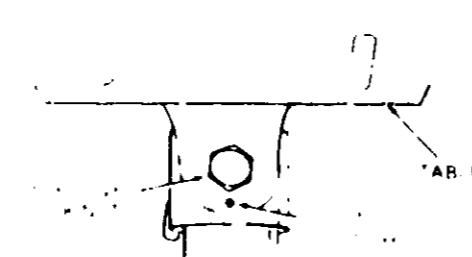
NOTE The adjustment square must be true. Unpacking and checking squareness is the first method.

1. Insert a precision square stem rod approximately 1/2" long in the hole and tighten.
2. With tape around the rod, check to see if square is in contact with the combination square of the head. If not, repeat.



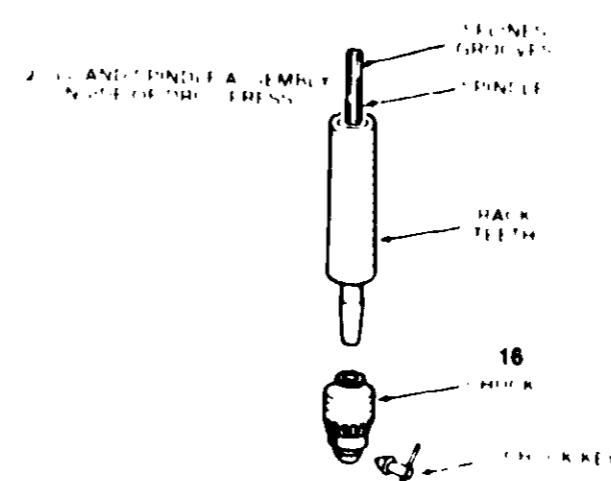
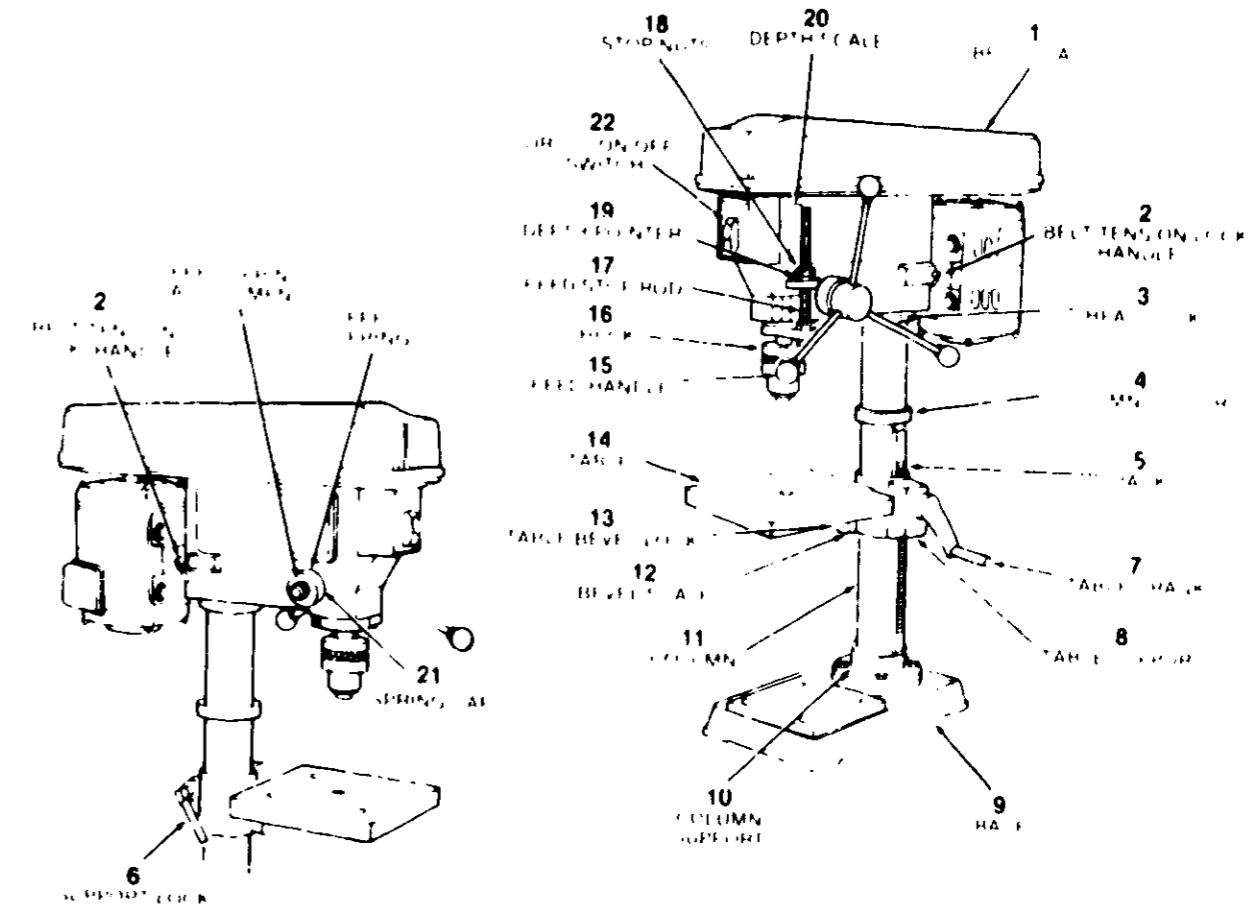
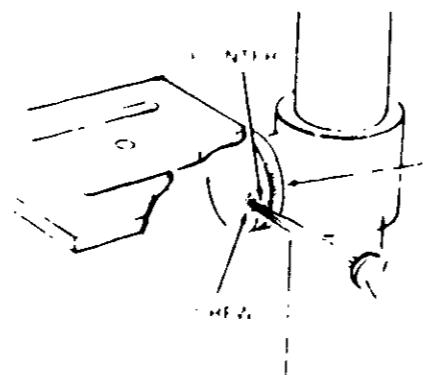
3. If adjustment is not exactly true, loosen the set screw with a 1/8" HEX KEY. Then turn the table head clockwise until the square is true. Then retighten the set screw with the key.

4. Align the square to the body of the table.
5. Retighten table bevel lock nut.
6. Retighten set screw.



ADJUSTING POINTER

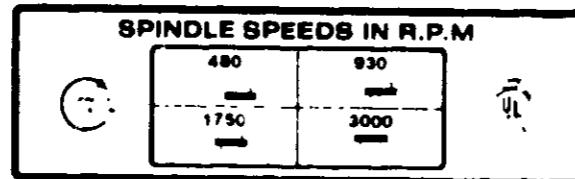
1. With the table squared to the head, the table bevel pointer should be adjusted.
2. Loosen screw in pointer with screw driver and move pointer to "0" position on scale. Retighten screw.



This Drill Press has 4 speeds as listed below

480 RPM
930 RPM
1750 RPM
3000 RPM

See right side of Head for speed placement of belts on pulleys



- 1 **BELT GUARD** Covers pulleys and belt when operating the press.
- 2 **BELT TENSION LOCK HANDLES** Tighten to lock motor to belt. Do not tighten until belt is straight and tensioned.
- 3 **HEAD LOCK** Locks the head to the column. Always have it locked in place while operating the drill press.
- 4 **COLUMN COLLAR** Holds the rack to the column. Rack remains movable in order to permit table support movements.
- 5 **RACK** Combines with gear mechanism to provide easy elevation of table by hand or power table crank.
- 6 **SUPPORT LOCK** Tightening locks table support to column. Always have it locked in place while operating the Drill Press.
- 7 **TABLE CRANK** Turn clockwise to elevate table. Support lock must be released before using crank.
- 8 **TABLE SUPPORT** Rides on column to support table.
- 9 **BASE** Supports Drill Press for added stability. Holes are provided in base to bolt Drill Press to bench. (See Additional Safety Instructions for Drill Presses)
- 10 **COLUMN SUPPORT** Supports column guides, rack and provides mounting holes for column to base.

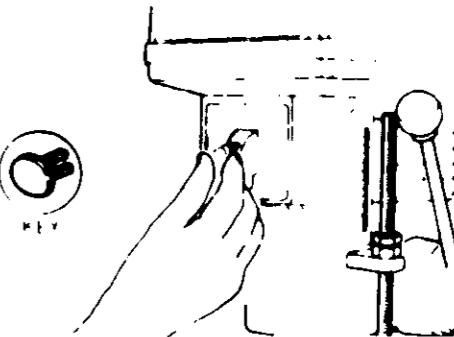
- 11 **COLUMN** Connects table and base to the press for the easy alignment and movement.
- 12 **BEVEL SCALE** Shows angle of table for bevel operations. It is graduated in table degrees.
- 13 **TABLE BEVEL LOCK** Locks the table in any position from 0-45°.
- 14 **TABLE** Provides working surface to support workpiece.
- 15 **FEED HANDLE** For moving the quill up or down. One or two may be removed if necessary whenever the workpiece is of such unusual shape that it interferes with the handles.
- 16 **CHUCK** Holds drill bit or other recommended accessory to perform desired operations.
- 17 **FEED STOP ROD** Holds stop nuts for drilling to specific depths.
- 18 **STOP NUTS** Limits the downward movement of the quill at any desired point within its travel and prevents the pointer from moving upward.
- 19 **DEPTH POINTER** Indicates drilling depth and distance between stop nuts.
- 20 **DEPTH SCALE** Shows depth of hole being drilled in inches and millimeters.
- 21 **SPRING CAP** Provides means to adjust quill spring tension.

getting to know your drill press

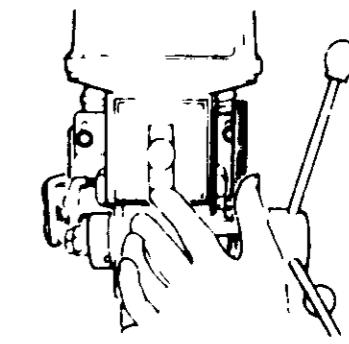
22 **ON-OFF SWITCH** Has locking feature. THIS FEATURE IS INTENDED TO PREVENT UNAUTHORIZED AND POSSIBLE HAZARDOUS USE BY CHILDREN AND OTHERS.

Insert KEY into switch.

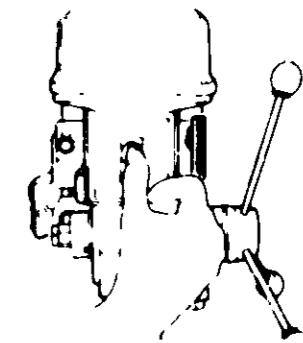
NOTE Key is made of yellow plastic.



To turn drill ON
Insert finger under switch lever and push.

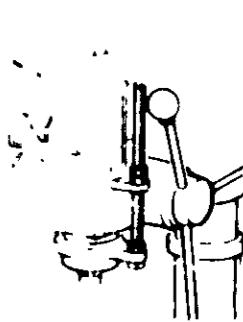


To turn drill OFF
Push lever in
In an emergency, if the drill bit BINDS or STALLS or tends to tear the workpiece loose you can QUICKLY turn the drill OFF by hitting the switch with the palm of your hand.



To lock switch in OFF position - hold switch IN with one hand - REMOVE key with other hand.

WARNING For your own safety, always lock the switch 'OFF' when Drill Press is not in use. Remove key and keep it in a safe place. Also in the event of a power failure (all of your lights go out) or blown fuse or tripping circuit breaker, turn switch off. Lock it and remove the key. This will prevent the Drill Press from starting up again when the power comes back on.



CHUCK KEY It is a self-ejecting chuck key which will pop out of the chuck when you let go of it. This action is designed to prevent the loss of the chuck key from the chuck when power is turned ON. Do not use any other key as a substitute or a new key if damaged or lost.

BELT TENSION Refer to the Assembly, Installation and Tensioning Belt Page 1

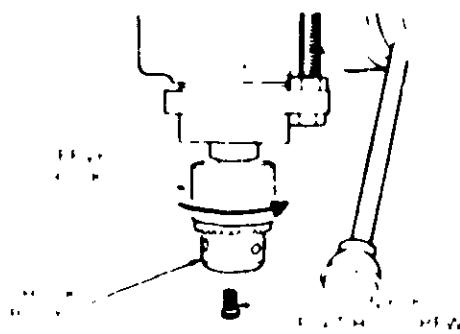
REMOVING THE CHUCK

Operate the CHUCK WRENCH while holding the key securely.

- Insert a NEW CHUCK KEY into the CHUCK JAWS.
- Carefully back off the CHUCK WRENCH until the CHUCK JAWS are free from the CHUCK. Do not let the CHUCK JAWS hit the table when removing the CHUCK.
- Store the NEW CHUCK KEY.

DRILLING SPEED Can be changed by placing the belt on one of the STEPS given in the chart. See Operation chart on page 9 of this book.

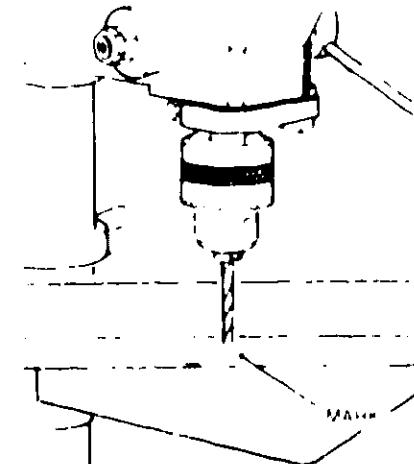
The following are approximate drilling speeds for the use of the LEFT side of the CHUCK.



DRILLING TO DEPTH

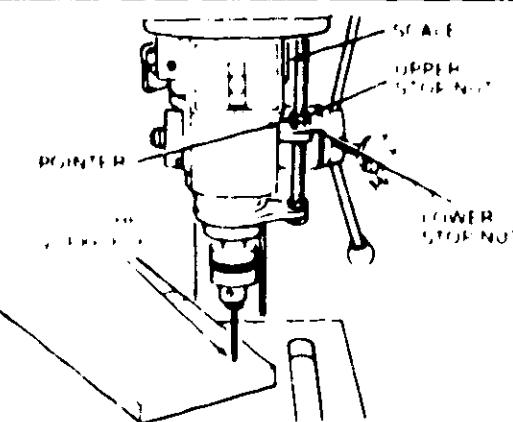
To drill a BULLPUP hole, until the way through to a given depth can be done in 2 ways:

1. Mark the depth of the hole on the side of the workpiece.
2. With the switch OFF bring the drill down until the TIP of the bit is even with the mark.
3. Spin the lower nut down to contact the depth stop lug on the Head.
4. Move the POINTER all the way down.
5. Spin the upper nut down and tighten again the pointer.



ANOTHER WAY - DEPTH SCALE

1. With the switch OFF bring the drill down until the TIP touches the TOP of the WORKPIECE.
2. Adjust the nuts so the Pointer is set to the desired DEPTH. TIGHTEN the UPPER NUT against the Pointer. For example, if you want to drill a hole one inch deep, set the pointer at the one inch mark on the scale.



basic drill press operation

Follow the following instructions for operating your drill press to get the best results and to minimize the chance of personal injury.

WARNING For your own safety always observe the safety precautions here and on pages 2, 3 and 4

1 Protection Eyes, Hands, Face, Ears and Body

WARNING To avoid being pulled into the spinning tool -

- 1 Do NOT wear
 - gloves
 - necktie
 - loose clothing
 - jewelry
- 2 Tie back long hair

a. If you are using your hands or arms in a spinning machine, make sure they have been cleaned. Do not use a cloth or the hands with any other spinning machine as a safety device on the power tool. If you are performing any task with the hands, the parts must be properly repaired or replaced.

b. Never place your hands or arms in a position where they could contact the tool or other cutting tool. If the workpiece should unexpectedly shift or fly, hand should stop.

c. If you are using your hands or arms in a spinning machine, follow instructions exactly as given and shown in adjusting spring tension of spin.

d. To prevent the workpiece from being torn from your hands, spinning of the tool, shattering the tool or being thrown, always properly support your work so it won't shift or bind on the tool.

Aways position BACKUP MATERIAL use beneath the workpiece to contact the left side of the column.

Whenever possible, position the WORKPIECE to contact the left side of the column. If it is too short or the table is tilted, clamp solidly to the table. Use table slots or clamping edge around the outside edge of the table.

A DRILL PRESS VICE must always be fastened to the table.

Never perform any operation FREE HAND (hand holding workpiece) rather than supporting it on the table, except when polishing.

Securely lock Head and Support to Column, Table Arm to Support, and Table to Table Arm before operating the press.

Never move the Head or Table while the tool is running.

Before starting the operation, plug the motor switch to make sure the drill or other cutting tool does not have excessive runout (wobble) or cause vibration.

If a workpiece overhangs the table such that it will fall or tip, do not hold or clamp the table or provide auxiliary support.

Use fixtures for unusual operations to adequately hold, guide and position workpiece.

Use the SPINDLE SPEED recommended for the specific operation and workpiece material. Check the page on the left side of the head for drilling information for accessories. Refer to the instructions provided with the accessories.

- a. Never climb on the drill press. Table could break or pull the entire drill press down on you.
- b. Turn the motor Switch OFF and put away the Switch Key when leaving the drill press.
- c. To avoid injury from thrown work or tool contact, do NOT perform layout assembly or setup work on the table while the cutting tool is rotating.

2 Use only accessories designed for this drill press to avoid serious injury from thrown broken parts or work pieces

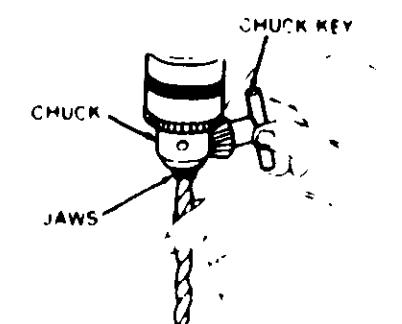
- a. Holesaws must NEVER be operated on this drill press at a speed greater than 400 RPM.
- b. Drum sanders must NEVER be operated on this drill press at a speed greater than 1800 RPM.
- c. Do not install or use any drill that exceeds 7 in length or extends 6 below the chuck jaws. They can suddenly bend outward or break.
- d. Do not use wire wheels, router bits, shaper cutters, circle fly cutters or rotary planers on the drill press.

INSTALLING DRILLS

Insert drill into chuck far enough to obtain maximum GRIPPING of the CHUCK JAWS. The jaws are approx. 1 in. long. When using a small drill, do not insert it so far that the jaws touch the flutes (spiral grooves) of the drill.

Make sure that the drill is CENTER REED in the chuck before tightening the chuck with the key.

Tighten the drill sufficiently so that it does not slip while drilling.



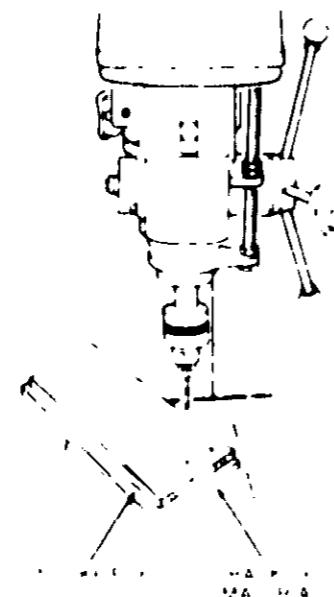
basic drill press operation

POSITIONING TABLE AND WORKPIECE

LOCK THE TABLE TO THE COLUMN POSITION SO THAT THE TOP OF THE DRILL STICKS UP ABOVE THE TOP OF THE WORKPIECE.

A WOODEN PLATE OR BACK UP MATERIAL IS RECOMMENDED TO LAY ON THE TABLE UNDERNEATH THE WORKPIECE. THIS IS TO PREVENT THE DRILL FROM HAVING TO DRILL THROUGH THE UNDER SIDE OF THE WORKPIECE. THIS IS THE PRIMARY REASON TO USE THE BACK UP MATERIAL. DRILLING THROUGH THE UNDER SIDE OF THE WORKPIECE CAN CAUSE THE DRILL TO BREAK OR THE DRILL TO GO OUT OF THE DRILL PRESS COLUMN.

WARNING To prevent the workpiece or the backup material from being torn from your hand while drilling position them against the left side of the column. If the workpiece or the backup material are not long enough to reach the column clamp them to the table. Failure to do this could result in personal injury.



CLAMPING THE VISE

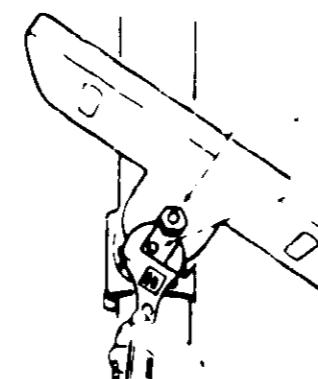
WARNING The vise must be clamped or bolted to the table to avoid injury from spinning work and vise or tool breakage.



ТИЛТИНГ TABLE

LOCK THE TABLE TO THE COLUMN POSITION SO THAT THE TOP OF THE DRILL STICKS UP ABOVE THE TOP OF THE WORKPIECE. THIS IS TO PREVENT THE DRILL FROM HAVING TO DRILL THROUGH THE UNDER SIDE OF THE WORKPIECE.

LOCK THE TABLE TO THE COLUMN POSITION SO THAT THE TOP OF THE DRILL STICKS UP ABOVE THE TOP OF THE WORKPIECE. THIS IS TO PREVENT THE DRILL FROM HAVING TO DRILL THROUGH THE UNDER SIDE OF THE WORKPIECE.



basic drill press operation

WARNING To avoid injury from spinning work or tool breakage, always clamp workpiece and back-up material securely to table before operating Drill Press with the table tilted.

1. Turn the switch ON and place the workpiece on the table. Turn the table to the desired position. Turn the switch OFF.

HOLE LOCATION

Mark the center of the workpiece with a pencil. Turn the switch ON and place the workpiece on the table. Turn the switch OFF.

Before turning the switch ON, bring the switch down to the workpiece to align it with the hole location.

FEEDING

Push workpiece feed fingers with only enough effort to move the feed fingers.

Feeding TOO HARD ONLY CAUSES THE DRILL TO BREAK.

Feeding TOO RAPIDLY might stop the motor. Turn the switch OFF. TURN IT ON AGAIN after the workpiece COOSSES OR BREAKS OR BENDS.

adjustments

WARNING For your own safety turn switch OFF and remove plug from power source outlet before making any adjustments. To avoid injury from thrown parts due to spring release follow instructions carefully.

QUILL RETURN SPRING

1. Move the stop nut and depth pointer to the upper most position and lock in place with a wrench to prevent the drilling wheel tensioning spring.

2. Lower table for additional clearance.

3. Work from left side of Drill Press.

4. Place a screwdriver in lower front notch of spring cap and hold it in place while loosening and removing jam [outer] nut only.

5. With screwdriver remaining in notch loosen large standard [inner] nut cap approximately 1/8" until notch disengages from boss on head. DO NOT REMOVE THIS NUT.

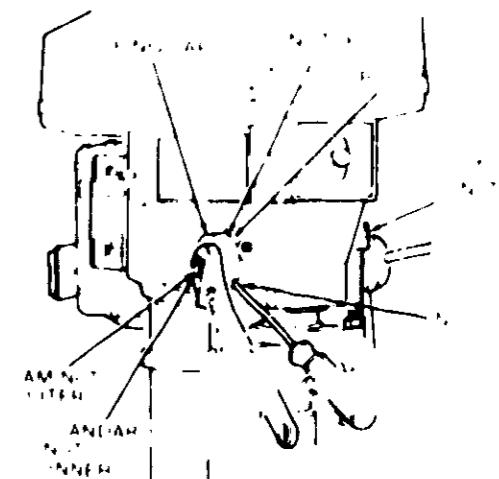
6. Carefully turn screwdriver counter clockwise until notch is free of boss. DO NOT REMOVE SCREWDRIVER.

7. Tighten standard nut with wrench only enough to engage boss. Do not overtighten as this will restrict quill movement. Remove screwdriver.

8. Move stop nuts and depth pointer to upper most position and check tension while turning feed handles.

9. If there is not enough tension on spring, repeat steps 4-8 moving only ONE notch each time and checking tension after EACH repetition.

10. Proper tension is achieved when quill returns gently to full up position when release from 3/4" depth.



11. When there is enough tension after checking, replace jam nut and tighten to standard nut. BUT do not overtighten against standard nut.

12. Check quill while feeding to have smooth and unrestricted movement. If movement is too tight loosen jam nut and SLIGHTLY loosen standard nut until unrestricted. Retighten jam nut.

maintenance

WARNING For your own safety turn switch OFF and remove plug from power source outlet before maintaining or lubricating your drill press.

Frequency of maintenance may vary depending on use.

Do not use oil or grease on any part of the drill press except the motor.

WARNING To avoid shock or fire hazard if the power cord is worn or cut or damaged in any way have it replaced immediately.

lubrication

Always use SAE 30 or 40 weight motor oil.

Check oil level in motor oil tank. If oil is low add oil until level is correct. NEVER add oil to the oil tank when the motor is running. If oil is too full, remove oil tank and pour oil out.

recommended accessories

WARNING Use only recommended accessories. Follow instructions that accompany accessories. Use of improper accessories may cause hazards.

Dr. Bits	See Catalog
Hold Down and Guide	9-2457
Dr. Press Vise	See Catalog
Dr. Press Molding Kit	4-29572
5 Pt. Stop Center Set	9-67063
Sanding Drum	4-2497-9-2498

The recommended accessories listed here are current and were available at the time this manual was printed.

trouble shooting

WARNING For your own safety turn switch OFF and always remove plug from power source outlet before trouble shooting.

• CONSULT YOUR LOCAL SEARS SERVICE CENTER IF ANY REASON MOTOR WILL NOT RUN

TROUBLE	PROBABLE CAUSE	REMEDY
Noisy Operation	1. Incorrect belt tension 2. Dry Spindle 3. Loose set screws 4. Loose or broken pulley	1. Adjust tension. See section ASSEMBLY TENSIONING BELT 2. Lubricate spindle. See Lubrication section 3. Check tightness of retaining pulley and tighten if necessary 4. Tighten set screws in pulleys
Drill Burns	1. Incorrect speed 2. Chip or metal stuck in hole 3. Dull Drill 4. Feeding too slow 5. Not lubricated	1. Change speed. See section Getting To Know Your Drill Press DRILLING SPEED 2. Retract feed to identify for scratches 3. Resharpen drill 4. Feed fast enough - allow drill to cut Lubricate drill. See Basic Drill Press Operation section
Drill leads off hole not round	1. Hard grain in wood or lengths of cutting tips and/or angles not equal	1. Resharpen drill correctly
Wood splinters on underside	1. No back up material under workpiece	1. Use back up material. See Basic Drill Press Operation section
Workpiece torn loose from hand	1. Not supported or clamped properly	1. Support workpiece or clamp it. See Basic Drill Press Operation section
Drill binds in workpiece	1. Workpiece pinching drill or excessive feed pressure 2. Improper belt tension	1. Support workpiece or clamp it. See Basic Drill Press Operation section 2. Adjust tension. See section ASSEMBLY TENSIONING BELT
Excessive drill runout or wobble	1. Bent drill 2. Worn spindle bearings 3. Drill not properly installed in chuck 4. Chuck not properly installed	1. Use a straight drill 2. Replace bearings 3. Install drill properly. See Basic Drill Press Operation section 4. Install chuck properly. refer to Unpacking and Assembly Instructions INSTALLING THE CHUCK
Quill Returns too slow or too fast	1. Spring has improper tension	1. Adjust spring tension. See section Adjustments Quill Return Spring